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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,015	11/08/2001	Frank Leymann	DE920000019	6126

24241 7590 03/18/2005
IBM MICROELECTRONICS
INTELLECTUAL PROPERTY LAW
1000 RIVER STREET
972 E
ESSEX JUNCTION, VT 05452

EXAMINER

MANOSKEY, JOSEPH D

ART UNIT	PAPER NUMBER
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2113

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/683,015	Applicant(s) LEYMANN ET AL.	
	Examiner Joseph Manoskey	Art Unit 2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12-16 is/are rejected.
- 7) ☒ Claim(s) 9-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Europe (Germany) on 14 November 200. It is noted, however, that applicant has not filed a certified copy of the EP00124796.4 application as required by 35 U.S.C. 119(b).

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Reference "530" of Fig. 5. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 15 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. "A computer program product for execution in a data processing system" is non-statutory subject matter. The examiner notes that this rejection could be overcome with the inclusion of the limitation "on a computer usable medium", however this will make claim 15 and claim 16 duplicate claims.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-8 and 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Bridge, Jr. et al., U.S. Patent 6,351,754, hereinafter referred to as "Bridge".

7. Referring to claim 1, Bridge teaches a method for controlling the amount of recovery downtime after a database system failure, this is interpreted as a method of dynamically controlling restart processing for recovery of an application (See Col. 6, lines 40-43). Bridge teaches the use of a checkpoint value and a target checkpoint value to determine when to take checkpoints of data, this is interpreted as dynamically calculating a restart time required to restart a resource manager in case of termination or recovery of said resource manager and dynamically initiating said resource manager to take a checkpoint whenever said restart time exceeds a specified restart time (See Col. 5, lines 26-38).

8. Referring to claim 2, Bridge discloses including change information that corresponds to a plurality of data blocks, this is interpreted as receiving a new request to modify a resource (See Col. 5, lines 26-38).

9. Referring to claim 3, Bridge teaches the checkpoint value indicating all the records have to be processed after a failure, this is interpreted as calculating said restart time to include the new request and all accumulated requests since a last checkpoint which participate in the restart processing (See Col. 5, lines 26-28).

10. Referring to claim 4, Bridge discloses the checkpoint value being based on the desired number data blocks reads required during recovery, this is interpreted as the

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specified restart time is specified to said resource manager by said application (See Col. 5, lines 57-59).

11. Referring to claims 5 and 6, Bridge teaches the system containing clients and hosts, this is interpreted as the application comprising application clients and application servers (See Fig. 2).

12. Referring to claim 7, Bridge discloses the use of a redo log file, this is interpreted as a request-load-log of all accumulated requests since said last checkpoint for the step of dynamically calculating said restart time (See Col. 8, line 66 to Col. 9, line 4).

13. Referring to claim 8, Bridge teaches the system connected via a network, this is interpreted as a plurality of resource managers are connected to said application server (See Fig. 2).

14. Referring to claims 12 and 13, Bridge discloses the system being a database system, this is interpreted as an resource manager performs the steps of dynamically calculating and dynamically initiating and an application server performs the steps of dynamically calculating and dynamically initiating (See Fig. 2 and Col. 6, lines 40-43).

15. Referring to claim 14, Bridge teaches a method for controlling the amount of recovery downtime after a database system failure, this is interpreted as a method

recovering a valid state of a resource manager in response to an abnormal termination of the resource manager (See Col. 6, lines 40-43). Bridge teaches the checkpoint value indicating all the records have to be processed after a failure, this is interpreted receiving a plurality of requests for one or more resource managed by the resource manager (See Col. 5, lines 26-28). Bridge teaches the use of a checkpoint value and a target checkpoint value to determine when to take checkpoints of data, this is interpreted as calculating, as each one of the requests is processed, the time required to restore a valid state of the resource manager and saving the current state of the resource manager each time the calculated restore time exceeds a specified time period (See Col. 5, lines 26-38).

16. Referring to claims 15 and 16, Bridge teaches a executing instructions for the method for controlling the amount of recovery downtime after a database system failure, this is interpreted as a computer program product for a method of dynamically controlling restart processing for recovery of an application (See Col. 6, lines 40-43 and Col. 7, lines 17-45). Bridge teaches the use of a checkpoint value and a target checkpoint value to determine when to take checkpoints of data, this is interpreted as dynamically calculating a restart time required to restart a resource manager in case of termination or recovery of said resource manager and dynamically initiating said resource manager to take a checkpoint whenever said restart time exceeds a specified restart time (See Col. 5, lines 26-38).

Allowable Subject Matter

17. Claims 9-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following are examples of closely related checkpointing systems.

U.S. Patent 5,043,866 to Myre, Jr. et al.

U.S. Patent 5,721,918 to Nilsson et al.

U.S. Patent 5,850,522 to Wlaschin

U.S. Patent 6,161,219 to Ramkumar et al.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Manoskey whose telephone number is (571) 272-3648. The examiner can normally be reached on Mon.-Fri. (7:30am to 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JDM
March 16, 2005


ROBERT E. MOULTON
SUPERVISOR/PATENT EXAMINER
TECHNOLOGY CENTER 2100